

Attorney Docket No. 59034-8019.US01

AMENDMENTS TO THE CLAIMS

1. (amended) A method for producing core-shell type metallic alloy nanoparticles, comprising:

providing a dispersion of a first metal as nanoparticles in an appropriate organic solvent;

providing a solution of a metallic precursor containing a second metal in an appropriate

organic solvent, in which the second metal has a reduction potential higher than that of the

first metal; and

combining the dispersion and the solution together to carry out the transmetalation reaction of the first and second metals, thereby core-shell type metallic alloy nanoparticles are formed.

2. (cancelled)

3. (unchanged) The method according to claim 1, wherein a stabilizer is added to the solution of the metallic precursor containing the second metal.

4. (unchanged) The method according to claim 3, wherein the stabilizer includes compounds having following structures:



in which R is a straight or branched hydrocarbonate group having 2 to 22 carbon atoms and X is selected from a isocyanate group, sulphonate group, phosphate group, carboxylate group, amine group and thiol group.

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5. (amended) The method according to claim 1, wherein the first metal comprises a member selected from the group consisting of manganese, chromium, iron, cobalt, nickel, copper, silver, palladium, and platinum and gold.

6. (amended) The method according to claim 1, wherein the first metal comprise at least two metals of core-shell type alloy nanoparticles or solid solution alloy type.

7. (unchanged) The method according to claim 1, wherein the metallic precursor containing the second metal comprises at least one member selected from the group consisting of β -diketonate compounds, phosphine compounds, organic metallic compounds, hydrocarbonate ammonium salt compounds of R_4N , in which R is a straight or branched chain having 1 to 22 carbon atoms or a chain containing a phenyl group and the like.

8. (amended) The method according to claim 1, wherein the reaction temperature required for the transmetalation reactions is 50 to 300°C.

Claims 9-23 (Cancelled).